

CLAIMS

1. A polishing apparatus for polishing a workpiece, comprising:
a processing section for polishing a workpiece;
a receiving section for supplying a workpiece to be polished to said processing section
and/or receiving a polished workpiece; and
a clean chamber disposed between said processing section and said receiving
section, with said clean chamber including a partition with a shutter which separates said
processing section from said receiving section.
2. The polishing apparatus according to claim 1, wherein a load and unload
section is disposed between said processing section and said receiving section.
3. The polishing apparatus according to claim 1, wherein the pressure in said clean
chamber is to be higher than the pressure in said processing section and lower than the
pressure in said receiving section.
4. The polishing apparatus according to claim 2, wherein a transfer device for
transferring the workpiece between said clean chamber and said receiving section is disposed
in said load and unload section.

5. A polishing apparatus for polishing a semiconductor wafer, comprising:
a processing section for polishing a semiconductor wafer;
a receiving section for supplying a semiconductor wafer to be polished to said processing section and receiving a polished semiconductor wafer; and
a positioning mechanism for aligning a reference position of the semiconductor wafer with a predetermined direction so that while the semiconductor wafer is transported between said processing section and said receiving section the semiconductor wafer is of a predetermined orientation.

6. The polishing apparatus according to claim 5, wherein said positioning mechanism is disposed in a clean chamber disposed between said processing section and said receiving section, with said clean chamber including a partition with a shutter which separates said processing section from said receiving section.

7. The polishing apparatus according to claim 5, wherein said positioning mechanism includes a rotating mechanism for holding and rotating the semiconductor wafer, and a sensor for detecting the reference position of the semiconductor wafer, such that the reference position of the semiconductor wafer can be aligned with the predetermined direction by using an output from said sensor and causing said rotating mechanism to rotate the semiconductor wafer.

8. A polishing apparatus for polishing a workpiece, comprising:
a processing section for polishing a workpiece;
a receiving section for supplying the workpiece to be polished to said processing section and/or receiving a polished workpiece;
a clean space defined adjacent to said receiving section; and
a clean air unit to clean air in said clean space.

9. The polishing apparatus according to claim 8, wherein said clean air unit comprises a filter unit

10. The polishing apparatus according to claim 9, wherein said filter unit comprises a filter and a fan.

11. The polishing apparatus according to claim 8, wherein said clean air unit is to produce a circulating flow in said clean space.

12. The polishing apparatus according to claim 8, wherein a pressure of said clean space is to be kept higher than a pressure of said processing section.

13. A polishing method for polishing a semiconductor wafer, comprising;
supplying a semiconductor wafer from a receiving section to a processing section;
polishing said semiconductor wafer in said processing section;
cleaning said polished semiconductor wafer;
aligning a reference position of said polished and cleaned semiconductor wafer with
a predetermined direction; and

returning said polished and cleaned semiconductor wafer to said receiving section.